



# Activity-based Management in France: A focus on the information systems department of a bank

Gregory Wegmann

Department of Business Administration – LEG, Fargo, UMR CNRS 5118

University of Burgundy

Dijon, France

[Gregory.wegmann@u-bourgogne.fr](mailto:Gregory.wegmann@u-bourgogne.fr)

International Conference on Economics, Business and Marketing Management

March 11-13, Shanghai, China, 2011

**Abstract**—The aim of the paper is to describe the Activity-based Costing and Management methods applied in France. For that purpose, we use a literature review and a case study. In a first time, we analyse the origins of the methods and their diffusion. Then we present the French situation. Finally, we propose a case study that takes place in a French bank. Our paper shows that the ABC and ABM methods are as developed in France as in the Anglo-Saxon countries and that the methods are strategically oriented.

**Keywords**—Activity based costing; activity-based management; case study; bank

## I. INTRODUCTION

Traditional management accounting practices have been under attack for their failure to provide detailed and timely information (Cooper & Kaplan, 1991; Gosselin, 1997; Kaplan, 1984; Maiga & Jacobs, 2003). Since the work of Johnson and Kaplan (1987) on the “Relevance Lost” of management accounting practices, the Anglo-Saxon scholars have been very dynamic about the study of the diffusion of cost and management accounting innovations (Anderson & Young, 1999; Chenhall & Langfield-Smith, 1998; Cooper & Kaplan, 1991; Gosselin, 1997; Johnson, 1992). Organizations like the Cam-i (Consortium of Advanced Management, International: <http://www.cam-i.org>), the IMA (Institute of Management Accountants: <http://www.imanet.org>) and the Harvard Business School support the investigations about management accounting innovations. The ABC method appeared in this context.

The ABC method was designed in the United-States during the 80’s (Cooper and Kaplan, 1988). It is a refined cost system which enables classifying more costs as direct, to expend the number of indirect-cost pools and to identify cost drivers. ABC favors better cost allocation using smaller cost pools called activities. Using cost drivers, the costs of these activities are the basis for assigning costs to other cost objects such as products or services. The Activity-based Management (ABM) represents a way of managing a firm with activities using the results of the ABC technic. Practically, there is a continuum between these two methods in a firm using them.

## II. THE ABC/ABM METHODS IN FRANCE

### A. The diffusion of ABC in the western countries

ABC was initially popularized in the USA in the mid-1980s (Jones and Dugdale, 2002). It was then diffused gradually in many other western countries throughout the 1990s (Bjornenak, 1997; Malmi, 1999). We can say nowadays that it is a widely developed method in the western countries. But differences in its diffusion remain strong.

U.K. Australian and Scandinavian firms followed the ABC adoption in the U.S. in its early days without too much gap in the implementation time frame. Based on a questionnaire survey of food companies in the U.S. and the Netherlands, Groot (1999) finds no significant difference in the adoption rates among the firms in the two countries. In the U.S., Green and Amenkhienan (1992) find that 45% of the firms surveyed use, to some extent at least, an ABC system. In the UK, the percentage of firms reported to have considered ABC varies between 32% (Bright et al., 1992), 37.6% (Drury et al., 1993), and 48% (Innes and Mitchell, 1991). However, when it comes to implementation, lower levels are reported. Different reasons were provided by researchers as to why companies may consider ABC system but end up with a decision not to implement it. Bright et al. (1992) suggest that the most important barriers to the introduction of the ABC system were the cost of change, the lack of relevant skills, and the quality of existing supporting data/systems. The major problems associated with the introduction of ABC system have been enumerated as follow (Green and Amenkhienan, 1992): the increased amount of detailed information needed by the new system, the increased paperwork, the difficulty in cost driver identification, and the insufficient support by top management.

In Japan (Lee et al., 1994), firms are quite pessimistic about ABC, discounting the role and utility substantially and using standard costing systems for costing purposes and relying on non-financial measures for strategic cost management (while ABC is more positive on the role and utility in strategic decision-making activities).

In European countries (except Great Britain), the gap in the implementation time frame was more important with a lower degree of diffusion.

As described by Bright et al. (1992), firms use cost management mainly to:

- Cost control.
- Fix prices
- Choose the investments.
- Manage performance.

Several inquiries find the same results: Mills (1988) in Great-Britain, Govindarajan and Anthony (1983) in the U.S., Ask and Ax (1992) in Sweden, and Yoshikawa et al. (1989) in Japan.

But some differences between countries can be put in evidence. In France, cost techniques are traditionally used to fix the selling prices, then to reduce the costs. Bescos et al. (2002) explain that French techniques to fix selling prices are less market oriented than Anglo-Saxon ones where the customer profitability analysis is essential.

### B. *The impact of cultural differences*

We have to take into account the cultural dimension concerning the management accounting tools diffusion. An important fact is that the Management Control is built on a North-American reference grounded on strong hypotheses about the representation of the firm and motivations of employees and managers' role. It fits more with a contractual type of management. It suggests a disciplinary approach (Agency and Transaction Costs theories) where the objectives of the management control activities are (Jensen and Meckling, 1992; Brickley et al. (1997)):

- To reduce conflicts and provide control.
- To tie the strategy to the resources allocation.
- And to facilitate the firm's internal coherence.

The situation is clearly different in countries like France, Germany or Northern countries of Europe where the cultural features are different (Hofstede, 1985). For instance, French and German managers see the checking behind control, while the Anglo-Saxons see steering there. In the French tradition, management accounting is mainly used to identify the cost of a product, an activity or a process whereas in the North American approach, Management accounting is used in a cybernetic process, by which the standards are compared with the real data and the deviations are identified and decomposed (variances analyses). French tended to calculate the prices starting from the costs, whereas the Americans start more readily from the principle according to which the prices result from the market. Firms from Northern countries of Europe (Sweden, Denmark ...) are more sensitive to knowledge-based approach of management (cf. Argyris and Schön, 1978: Organizational Learning Theory) where the participative approaches are favored. In this context, the value creation is the result of an increase of resources (Resource-based View approach, Penrose, 1959) and human competencies (Core-Competencies theory, Hamel and Prahalad, 1990).

How to allocate the indirect costs was the major problem for French management accounting pioneers (and German

ones). This problem led them to build an accounting technique very similar to Activity-based Costing (method of the homogeneous sections).

### C. *The diffusion of ABC/ABM in France*

The rate of innovation has been slowed in France by the existence of a legislation concerning management accounting until 1999. Today, the situation is quite similar as in the other European countries.

The first works on ABC date back to the late 1980s (Lorino, 1989). Mevellec (1991) and Lebas (1991) had a first contact with ABC during their trip to the USA in the mid-1980s. Lorino became president of the Cost Management System group for CAM-I Europe and promoted the ABC method (1989, 1991).

In France, like in the U.S., ABC was therefore problematized as a remedy for the crisis of management accounting. At the beginning, French scholars dedicated their works to the technical aspects of the method (architecture of the system, calculations and cost driver concept). Bescos and Mendoza (1994) were the first scholars who reported implementations in French companies.

ABC faced rapidly a controversy in France. It concerned the fact that some specialists contest its innovative character in comparison with an older French method called the "Sections Homogenes" (the homogenous sections). As explains Bouquin (1996), when implemented correctly, there is no difference between ABC and the *Sections Homogenes*. The problem is that the French method is frequently oversimplified.

Several studies are dedicated to ABC/ABM diffusion in France: De La Villarmois and Tondeur (1996), Nikitin (2000), Bescos et al. (2002), Alcouffe (2004), Godowski (2004) and Rahmouni (2008).

Bescos et al. (2002) find a rate of adoption of 23%, Alcouffe a rate of 16% whereas Bescos et al. (2002) find an equivalent level of adoption between Canada (22.6%) and France (23%) (Japan: 7%). French managers express a good opinion on ABC/ABM methods, thanks to professional journals. But they frequently hesitate to entirely adopt the method. They prefer limited experiments. Alcouffe (2004) used the « innovations diffusion theory » (Roger, 1983, 1995) to the subject of ABC/ABM diffusion. Godowski (2004) studied the ABC diffusion in the French banking system.

A more recent inquiry (see table 1, Rahmouni, 2008), find higher rate of adoption: 33.8% implemented and 18.2% in progress. Now, the level of diffusion in France seems as important as in the Anglo-Saxon countries. It could be even more important than for instance in Ireland and New Zealand (p. 226).

More precisely, the inquiry of Rahmouni (p. 227) reports that 30.2% of the firms of services use ABC, whereas this is the case for 39.1% of the industrial firms. Concerning the firms of services, 62.5% of the banks and insurances companies use ABC/ABM.

About the firms that have the project to implement ABC/ABM, 23.2% of them are delivering services whereas only 8.7% are industrial ones; which means that the future of

the ABC method in France concerns more specifically the activities of services. Maybe it could be explained by the high level of competition in those sectors in such a country like France.

TABLE I. LEVELS OF DIFFUSION OF ABC IN FRANCE

| ABC system   | Rahmouni (2008)         | Bescos et al. (2002)     |
|--------------|-------------------------|--------------------------|
| In progress  | 33.3 %                  | 23 %                     |
| In project   | 18.2 %                  | 23 %                     |
| Not retained | 48.5 %                  | 54 %                     |
| Total        | 100 % (66 French firms) | 100 % (122 French firms) |

In most of the cases (82%), the ABC method covers all the processes of the firms. The first objective of the method is to calculate the commercial costs and the customers' profitabilities, than the administrative (73%), research and development (64%) and information systems costs (59%).

These results show that it is quite interesting to describe a French experience that takes place in the information systems department of a bank.

### III. A STRATEGIC APPROACH OF THE ABC/ABM METHODS

Looking for management accounting methods which could clarify the decision making process, Johnson and Kaplan suggest: First, to analyze more deeply the organization activities and processes and second, to link together the strategic and the operational management. The ABC method was conceived at first to correct misleading overhead allocations. It was a response to the inaccurate standard costing American methods. But several scholars, like Lebas (1999) in France explain that rapidly, the ABC method has gained managerial (ABM, Activity based Management) and strategic dimensions (Jones and Dugdale, 2002). Today, the ABC/ABM systems follow three objectives:

- To improve the cost allocation process.
- To improve the measure of performances.
- To better manage processes and strategies.

To explain the strategic dimension of the ABC/ABM methods, it is important to understand the importance of the cost drivers' concept. Porter (1985, p. 63) was one of the first to use this concept. He explained that the cost drivers are the structural determinants of the costs of the organizational activities. Riley (1987) and Shank and Govindarajan (1989) developed a typology distinguishing two categories of cost drivers:

- "Structural" drivers (the strategic choices concerning the economic structure of the firm).
- "Executional" drivers (concerning operational activities).

Shank and Govindarajan explained that the cost drivers are keys success factors that management accounting sets along the firm's value chain. They have developed an operational model with the definition of Key Success

Factors, determined in using a competitive analysis of the environment and an analysis of the internal processes of the company, with the help of the ABC method. They explained that the ABC method is able to put in evidence these cost drivers. In that way, the cost drivers are able to explain the costs consumption and to describe the value chain, integrating the customers and suppliers dimensions in the cost allocation system. This approach materializes the link between strategic and operational management.

Now, in the western countries, the ABC/ABM models are based on a process approach of management accounting. In this context, the company is described as a network of horizontal, flat and transverse structures where the activities are organized according to market imperatives. Then, the ABC/ABM methods represent a competencies-based tool because there is a significant relationship between the processes and the competencies of an organization.

In France, ABC has also been perceived by most of the scholars as a management tool, referring to the Activity-based Management. This approach contains two dimensions: an organizational one, to model another way of the functioning of organizations, and a strategic one, to link strategy to operation management. One of the first French books about ABC (Lorino, 1991) suggests using ABC as a way to link strategy to operational management. Chauvey and Naro (2004) described in the same way the strategic potential of ABC. More recently, Alcouffe et al. (2010) have developed a typology of environmental cost drivers.

### IV. ILLUSTRATION IN A FRENCH BANK

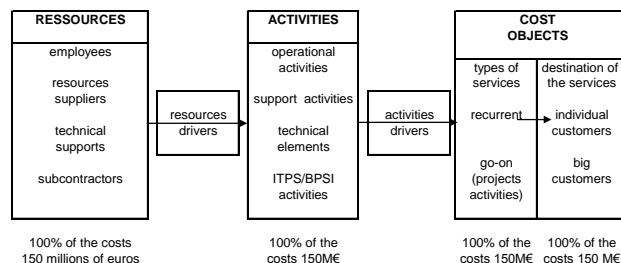
#### A. Case description

The ABC/ABM project of the Bank X began in 2004-2005. The purpose was to strengthen the cost allocation process so that we could assign relevant costs for customers and services. For the chief executive officer of the group, the ABC/ABM project is a priority. The department "Management Accounting and Information Systems Projects" is in charge of the project. Moreover, the top-management is strongly involved in the project and wants fast results. About six employees work for it with the help of a consultant. Let us precise that the bank X delivers banking services to big customers like "Carrefour" so that it needs a refined management accounting system that enables to calculate the cost of the services delivered to this company. The computing costs are a main part of the value of these services. This is the reason why the project group has to adapt the ABC method to the specificities of computing activities in a banking context.

At the end of 2008, a main task of the project group is to differentiate the types of credits. Because of a diversified credits offer, the analytical system to build needs to be quite refined. The types of the resources consumed are more diversified and a "time driver" is not enough to explain the costs causality. Moreover, several activities are subcontracted so that we need an interorganizational approach to construct the ABC model.

The figure 1 describes the ABC process applied to the computing services of the bank X. The figure 2 presents a map of the computing activities of this bank.

Figure 1. ABC process applied to the computing services of Bank X.



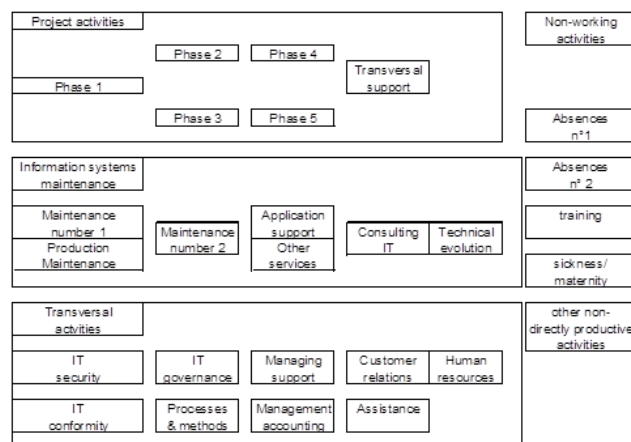
Costs of the resources are allocated to the computing activities (operational, support, projects, ...) thanks to the resources drivers (time consumed, m<sup>2</sup>, quantities, types of orders, ...) Costs of activities are then allocated to the types of computing services thanks to activities drivers (mainframe power, specificities of the proposal, ...), these services consuming the activities. They are finally allocated to the customers, service per service. Recurrent activities consume about 55% of the total of resources.

The process described leads to full costing by type of services, customers, geographic areas and countries. We can calculate for instance a cost for a service in progress, for a service ended, for saving files or covering costs. The main banking processes are modeled such as the credit process, the risk management process, etc.

The project group did some statistical tests to evaluate the degree of homogeneity of the activities costs and to correlate the cost drivers so that the models would be more accurate.

The last step of the project occurred from June 2009 until the end of the year 2010. At this time, the group project leader was able to present an income statement by service/customer/country built from the ABC architecture. Since July 2009, the main customers have been concerned so that a costs interorganizational investigation could be developed.

Figure 2. Map of the computing activities of bank X



## V. CONCLUSION

In France, the ABC and ABM methods are now as developed as in the Anglo-Saxon countries.

We observe in our case study that the customers and processes dimensions are very important. We put in evidence a strategic orientation of the ABC method. Concretely, the managers of the bank studied have used the results of the method to adjust the prices. Controllers could calculate costs per credit and per customer so that selling managers decide the relevant price for the delivered services. To conclude, we can say the ABC/ABM system of the bank X represents a strategic management accounting tool. The management accounting system of the bank X is also quite refined because it appears in an environment where processes are immaterial and costs less homogeneous than in an industrial one.

For a future research, we would like to observe ABC experiences in Asia.

## REFERENCES

- [1] S. Alcouffe, N. Berland, B. Dreveton, and M. Essid M (2010), "An empirical study of environmental cost drivers", Congress of the Francophone Accounting Association, May 2010, Nice, France, 2010, 25p.
- [2] S. Alcouffe, La diffusion et l'adoption des innovations managériales en comptabilité et contrôle de gestion : le cas de l'ABC en France (Diffusion and adoption of management innovations in Accounting and Management Accounting: the case of the ABC in France), PH.d dissertation, HEC (High School of Management), France, 2004.
- [3] S.W. Anderson and S.M. Young, "The Impact of Contextual and Process Factors on the Evaluation of Activity-Based Costing Systems", Accounting Organization and Society, vol. 24, n° 7, pp. 525-559, 1999.
- [4] R.N. Anthony, La fonction contrôle de gestion [The Management Accounting Function], Paris: Publi-Union, 1993.
- [5] Ch. Argyris and D.A. Schön, Organizational Learning. Readings, Addison-Wesley Publishing Company, 1978.
- [6] U. Ask and C. Ax, "Trends in the Development of Product Costing Practices and Techniques: A Survey of the Swedish Manufacturing Industry", 15th Congress of the European Accounting Association, Madrid, April, 1982.



- [7] P.L. Bescos and C. Mendoza, *Le Management de la Performance (The Performance Management)*, Editions Comptables Malheshherbes, Paris, 1994.
- [8] P.L. Bescos, E. Cauvin, M. Gosselin, and T. Yoshikawa, "La comptabilité par activités et la gestion des activités : comparaison entre le Canada et la France" (Activity-based costing and activity-based management: Comparison between Canada and France), *Comptabilité – Contrôle – Audit*, May, pp. 209-228 et p. 229-244, 2002.
- [9] T. Bjørnenak, "Diffusion and accounting : the case of ABC in Norway", *Management Accounting Research*, vol. 8, n° 1, pp. 3-17, 1997.
- [10] H. Bouquin, *Comptabilité de Gestion (Cost Management)*, 4ème édition, Economica, Paris, 2006.
- [11] J.A. Brickley, et al., *Managerial Economics and Organizational Architecture*. Mc-Graw Hill, 1997.
- [12] J. Bright, R. E. Davies, C. A. Downes, and R. C. Sweeting, *The Deployment of Costing Techniques and Practices: A UK Study*, *Management Accounting Research*, pp. 201-211, 1992.
- [13] J.N. Chauvey and G. Naro, "Les apports de l'ABC à l'analyse stratégique : les enseignements d'une recherche-intervention (Contributions of the ABC method to the strategic analysis: Learnings from a research-action study)", *Finance Contrôle Stratégie*, vol. 7, n° 3, pp. 63-89, 2004.
- [14] R.H. Chenhall and K. Langfield-Smith, "The relationship between strategic priorities, management techniques and management accounting: An empirical investigation using a systems approach", *Accounting, Organizations and Society*, vol. 23, n° 3, pp. 243-264, 1998.
- [15] R. Cooper and R.S. Kaplan, "Measure Costs Right: Make the Right Decisions", *Harvard Business Review*, September-October, pp. 96-103, 1988.
- [16] R. Cooper and R.S. Kaplan, *The Design of Cost Management Systems: Text, Cases and Readings*, Prentice-Hall, New York, 1991.
- [17] O. De La Villarmois and H. Tondeur, "L'ABC en France. Les déterminants de la mise en place (ABC in France. The determinants of the implementation)", 17th Congress of the French Association of Accounting, May, 1996.
- [18] C. Drury, S. Braund, P. Osborne, and M. Tayles, *A Survey of Management Accounting Practices in UK Manufacturing Companies*, London: ACCA, 1993.
- [19] C. Godowski, "La dynamique d'assimilation des approches par activités dans le domaine bancaire (The assimilation process of the ABC approaches in the Banking system)", *Comptabilité - Contrôle - Audit*, Tome 10, Volume 2, pp. 179-196, 2004.
- [20] M. Gosselin, "The effect of strategy and organizational structure on the adoption and implementation of activity-based costing", *Accounting, Organizations and Society*, vol. 22, n°2, pp. 105-122, 1997.
- [21] V. Govindarajan and R.N. Anthony R.N., "How Firms Use Cost Data in Price Decisions", *Strategic Finance*, vol. 65, n°1, pp. 30-34, 1983.
- [22] T.L. Groot T.L., "Activity-Based Costing in U.S. and Dutch Food Companies", *Advances in Management Accounting*, vol. 7, pp. 47-63, 1999.
- [23] F.B. Green and F.E. Amenkhiennan, "Accounting Innovations: A Cross-Sectional Survey of Manufacturing Firms", *Journal of Cost Management for the Manufacturing Industry*, (Spring), pp. 58-64, 1992.
- [24] G. Hamel and C.K. Prahalad, "The Core Competence of the Corporation", *Harvard Business Review*, vol. 68, n° 3, pp. 79-92, 1990.
- [25] G.H. Hofstede, "The interaction between national and organizational value system", *Journal of Management Studies*, Vol. 22, n° 4, pp. 347-57, 1985.
- [26] J. Innes and F. Mitchell, "ABC: A Survey of CIMA Members", *Management Accounting (UK)*, October, pp. 28-30, 1991.
- [27] M.C. Jensen and W.H. Meckling, "Specific and General Knowledge, and Organizational Structure", in L., Werin; H., Wijkander (dir.), *Contract Economics*, Blackwell, 1992.
- [28] H.T. Johnson, *Relevance Regained: From Top-Down Control to Bottom-up Empowerment*, The Free Press, New York, 1992.
- [29] H.T. Johnson and R.S. Kaplan, *Relevance Lost: The Rise and Fall of Management Accounting Systems*. Boston: Harvard Business School Press, 1987.
- [30] C. Jones and D. Dugdale, "The ABC bandwagon and the juggernaut of modernity", *Accounting Organizations and Society*, vol. 27, pp. 121-163, 2002.
- [31] R.S. Kaplan, "The evolution of management accounting", *The Accounting Review*, July, pp. 390-418, 1984.
- [32] M. Lebas, "Comptabilité analytique basée sur les activités, analyse et gestion des activités (Management accounting based on activities, analysis et management of activities)", *Revue Française de Comptabilité*, n° 226, September, pp. 47-63, 1991.
- [33] M. Lebas, "Why ABC? Accounting Based on Causality Rather than Activity-Based Costing", *European Management Journal*, vol. 17, n° 5, pp. 501-511, 1999.
- [34] J.Y. Lee, R. Jacob, and M. Ulinski, "Activity-based costing and Japanese cost management techniques: A comparison", *Advances in Management Accounting*, vol. 3, pp. 179-196, 1994.
- [35] P. Lorino, *Le pilotage stratégique des coûts (Strategic Cost Management)*, Dunod, Paris, 1991.
- [36] P. Lorino, *L'économiste et le manager (The economist and the manager)*, La Découverte, Paris, 1989.
- [37] A.S. Maiga and F.A. Jacobs, "Balanced scorecard, activity-based costing and company performance: An empirical analysis", *Journal of Management Issues*, vol. 15, n° 3, pp. 283-301, 2003.
- [38] T. Malmi, "Activity-based costing diffusion across organizations: an exploratory empirical analysis of Finnish firms", *Accounting, Organizations and Society*, vol. 24, pp. 649-672, 1999.
- [39] P. Mévellec, *Outils de gestion : la pertinence retrouvée (Management tools: The relevance regained)*, Editions Comptables Malesherbes, Paris, 1991.
- [40] P. Mévellec, "La comptabilité à base d'activités : une double question de sens (Activity based costing: A double meaning question)", *Comptabilité – Contrôle – Audit*, Tome 1, Volume 1, pp. 62-80, 1995.
- [41] P. Mévellec, *Les systèmes de coûts. Objectifs, paramètres de conception et analyse comparée [The costs systems. Objectives, conception parameters and compared analysis]*. Paris: Dunod, 2005.
- [42] R.W. Mills, "Pricing decisions in UK manufacturing and service companies", *Management Accounting (UK)*, November, pp. 38-39, 1988.
- [43] E. Penrose, *The Theory of the Growth of the Firm*. Oxford UK: Oxford University Press, 1959.
- [44] M. Porter, *Competitive Advantage: Creating and Sustaining Superior Advantage*. New York: The Free Press, 1985.
- [45] A. Rahmouni, "La mise en œuvre de la comptabilité par activités dans les entreprises françaises : caractéristiques et facteurs d'adoption et de succès (the settling of the ABC method in the French firms: features and adoption and success variables)", Ph.D dissertation, September 2008, University of Nice, France.
- [46] D. Riley, *Competitive cost based investment strategies for industrial companies*, in *Manufacturing Issues*, New York, Booz Allen and Hamilton, 1987.
- [47] E.M. Rogers, *Diffusion of Innovations*, 3ème Edition, New York, Free Press, 1983.
- [48] E.M. Rogers, *Diffusion of Innovations*, 4ème Edition, New York, The Free Press, 1995.

- [49] R. Roslender and S.J. Hart, "In Search of Strategic Management Accounting: Theoretical and Field Study Perspectives", *Management Accounting Research*, vol. 14, pp. 255-279, 2003.
- [50] J. Shank and V. Govindarajan, *Strategic Cost Analysis: The Evolution from Managerial to Strategic Accounting*. Illinois: Burn Ridge Inc, 1989.
- [51] T. Yoshikawa, J. Innes, and F. Mitchell, "Japanese Management Accounting: Comparative Survey", *Management Accounting (UK)*, vol. 52, pp. 20-23, November 1989.